

CLAIMS:

1. Circuit arrangement for operating a high pressure discharge lamp equipped with
 - input terminals for connection to the poles of a supply voltage source,
 - a DC-DC-converter coupled to the input terminals and comprising
 - an inductive element L1,
 - a unidirectional element D1,
 - a switching element S1,
 - output terminals,
 - a first control circuit coupled to a control electrode of the switching element S1 for generating a control signal for rendering the switching element S1 alternately conductive and non-conductive,
 - a second control circuit, coupled with the first control circuit for controlling the level of an output voltage of the DC-DC converter that is present between the output terminals,
 - a DC-AC-converter coupled to the output terminals and equipped with lamp connection terminals for generating an AC lamp current out of the output voltage,characterized in that the second control circuit is further equipped with a state control circuit for changing the level at which the output voltage is controlled from a first level associated with the starting of the high pressure discharge lamp to a second level associated with the stationary operation of the high pressure discharge lamp.
2. Circuit arrangement according to claim 1, wherein the first level is higher than the second level.
3. Circuit arrangement according to claim 1 or 2, wherein the circuit arrangement is equipped with means for generating a power signal that represents the power supplied to the high pressure discharge lamp and for activating the state control circuit after the power signal has increased above a predetermined reference value.

4. Circuit arrangement according to claim 3, wherein the circuit arrangement is further equipped with a delay circuit coupled to the state control circuit for timing a predetermined delay time interval after the power signal has increased above the predetermined reference value and for activating the state control circuit after said predetermined delay time interval has timed out.

5. Circuit arrangement according to claim 1, 2, 3 or 4, wherein the second control circuit is equipped with a third control circuit coupled to the lamp connection terminals for controlling the second level in dependency of the width of a reignition voltage peak present between the lamp terminals when the DC-AC-converter changes the polarity of the lamp voltage.

6. Circuit arrangement according to claim 1, 2, 3, 4, or 5, wherein the DC-AC-converter is a bridge circuit comprising at least two bridge switching elements and a bridge control circuit coupled with control electrodes of the bridge switching elements.